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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/783,112

02/14/2001

Josh N. Hogan

10971806-3

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08/03/2006

HEWLETT-PACKARD COMPANY

Intellectual Property Administration

P.O. Box 272400

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EXAMINER

GYORFI, THOMAS A

ART UNIT

PAPER NUMBER

2135

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/783,112

Applicant(s)

HOGAN, JOSH N.

Examiner

Tom Gyorf

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26 is/are allowed.
- 6) ☒ Claim(s) 27 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 26-28 remain for examination. The correspondence filed 7/10/06 cancelled claims 1 and 10.

Allowable Subject Matter

2. Claim 26 is allowed.
3. The indicated allowability of claims 27 and 28 is withdrawn in view of the newly discovered reference(s) to Menezes et al. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 27 recites a reader, and a controller for performing a bitwise XOR encryption of an encryption mask and a block of ECC-encoded data, a product of the bitwise XOR being an encrypted block. The two limitations do not appear to be interrelated in any way: there is no recitation of the reader using any of the operands used by the controller; nor is there a recitation that the claimed controller receives any of the operands from the reader. Additionally, the limitations by themselves are insufficient to perform the functions of a drive as recited in the preamble, even when considered in its broadest reasonable sense. Thus, the body of the claim appears to be incomplete, or the preamble appears to be inaccurate.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claim 28 is rejected under 35 U.S.C. 102(a) as being unpatentable over the “Handbook of Applied Cryptography” (hereinafter, Menezes).

Regarding claim 28:

Menezes discloses a data processor for performing a bitwise XOR encryption of an encryption mask and a block of data, a product of the bitwise XOR being an encrypted block (page 20, “1.35 Example”). It is noted that Menezes discloses that the XOR operation can be performed on all binary strings of a given length (in the non-limiting example, strings of length 6 are cited); additionally, it is noted that “ECC-encoded” data is merely binary data wherein the individual bits are arranged in such a way as to be useful in error-correction operations (of which no error-correcting operations are recited in the claim). Thus, for any given binary string (i.e. “block”) of a particular length, the set of all binary values that would conform to an ECC-encoded block is a proper subset of the set of all binary values of said particular length, the latter of which is explicitly disclosed by Menezes as being suitable for XOR-encryption. Therefore, the genus disclosed by Menezes anticipates the species of the claim (for further reference, see MPEP 2132.02).

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Menezes, and further in view of Chuang (U.S. Patent 6,003,151).

Regarding claim 27:

Menezes discloses a controller for performing a bitwise XOR encryption of an encryption mask and a block of data, a product of the bitwise XOR being an encrypted block (page 20, "1.35 Example"). Menezes further discloses encrypting ECC-encoded data (see the rejection of claim 28 above).

Menezes does not explicitly disclose a reader in a drive. However, Chuang discloses a reader (col. 6, lines 50-56) in a drive that already possesses XOR capabilities with ECC encoded data (col. 7, lines 45-55; col. 13, lines 1-10). It would have been obvious to implement the XOR controller of Menezes into the drive disclosed by Chuang. The motivation for doing so would be to give the controller a source of operands without which it could not perform its function.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- "Cryptography and Key Management" © 1996 Daniel & Julie Ryan.

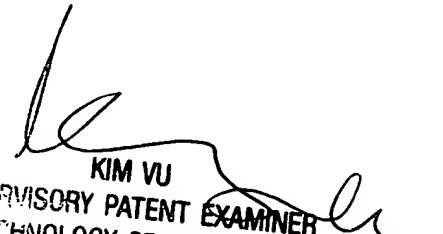
- "WWW Beyond the Basics: WWW Security" ©1996 Carlin Groza
- "Tasty Bits from the Technology Front for 1995-10-03: The Internet is full; one-time pad encryption" ©1995 Keith Dawson.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Gyorfi whose telephone number is (571) 272-3849. The examiner can normally be reached on 8:30am - 5:00pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TAG
7/26/06


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100